

FEOKTISTOV, B.I.

Study of the physical development and health in young men.
Nauch. trudy Kaz. gos. med. inst. 14:57-58 '64. (MIRA 18:9)

1. Kafedra toksikologii (zav. - kand. med. nauk B.I.Feoktistov)
Kazanskogo meditsinskogo instituta.

DANILOV, V.I.; YENCHEVICH, I.B.; NOVIKOV, D.L.; POLFEROV, E.A.;
SAFONOV, A.N.; FEOKTISTOV, B.V.

[Calculation of the initial region of stable phase oscillations in a synchrocyclotron] Raschet nachal'noi oblasti ustoychivyykh kolebaniy v sinkhrotsiklotrone. Dubna, Ob"edinenyyi in-t iadernyykh issl. 1963. 24 p. (MIRA 17:7)

FIKATISTOV, F., inst.

Fabrics made of synthetic fibers. Sov. tech.no.4:48-51 Ap '58.
(Textile fibers, Synthetic) (MIRA 11:4)

L 58859-65 EPA(w)-2/EWT(m)/EWA(m)-2 Pt-7 IJP(c) GS
ACCESSION NR: AT5007941 8/0000/64/000/000/0595/0599
AUTHOR: Danilov, V. I.; Yenchovich, I. B.; Novikov, D. L.; Polferov, E. A.; Safonov, A. N.; Feoktistov, B. V. 31 30241
TITLE: Calculation in the region of the origin of the stable phase oscillations in the synchrocyclotron 19
SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy. Moscow, Atomizdat, 1964, 595-599
TOPIC TAGS: synchrocyclotron, high energy accelerator
ABSTRACT: The capture and acceleration of charged particles in the central region of the synchrocyclotron is not adequately described by the phase equation primarily because the maximum possible energy growth per revolution is an increasing function of the radius and approaches the slit value only at radii 5-10 times larger than the aperture of the dee. The phase motion of protons in the central region of the synchrocyclotron is now obtained by solving the equations of motion of charged particles in electric and magnetic fields of an accelerator on high-speed digital computers. Considering only the motion of charged particles in the median plane of the magnetic field possessing axial symmetry, one has the following set of differential
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equations (S. P. Lomnev and G. A. Tyagunov, in *Uskoriteli*, G. A. Tyagunov, Editor, No. 2, Moscow, Atomizdat, 1960):

$$\begin{aligned} \dot{r} &= A_0(1-\beta^2)^{1/2} (A_r(1-r^2) - A_0^2 r) + \frac{a^2}{r}, \\ \dot{\theta} &= \frac{1}{r} (A_0(1-\beta^2)^{1/2} (A_\theta(1-a^2) - A_r r) - \frac{2a^2}{r}), \end{aligned} \quad (1)$$

where the dot indicates differentiation with respect to ct , Z_0 is the impedance of free space, and $A_0 = \epsilon/m_0 c^2$; $a = r\beta$; $A_r = E_r + aZ_0 B_\theta$; $A_\theta = E_\theta - rZ_0 B_r$; B_r - magnetic induction; E_r , E_θ - components of the electric field strength. After a number of transformations the dependence of the electric field strength upon radius is represented in the following form

$$E_r = \frac{V_0 \sin \theta}{1 + \frac{a^2}{Z_0^2} r^2 \sin^2 \theta} \cos(1 + \Delta)(1 - \gamma \cos \theta) \cos \theta, \quad (2)$$

where

$$\Delta = \frac{\pi}{2}, \quad \gamma = \frac{1}{2} \left(\frac{a^2}{Z_0^2} + \frac{1}{a^2} \right). \quad (3)$$

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$E_0 = U_0/D$; U_0 -amplitude of the accelerating voltage; D -dee aperture; ω_0 -frequency of revolution of an ion at the center. The present report discusses the solution of the equations of motion (1) for given boundary value conditions and parameters in the case of the OIYaI synchrocyclotron. A high-speed digital computer was used to obtain curves of (a) radius and phase versus time, (b) capture effectiveness versus gamma-coordinate for various accelerator parameters (e.g. aperture), (c) damping of amplitude of radial-phasal oscillations versus radius, and (d) regions of stability of ϕ versus ϕ (ϕ -phase). The trajectories of radial-phase oscillations were used to determine the effectiveness of capture as a function of various accelerator parameters and also the ion beam configuration during the acceleration of the ions from the center to a radius of 50 cm. Orig. art. has: 5 figures.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy, Dubna (Joint Institute of Nuclear Research)

SUBMITTED: 26 May 64

ENCL: 00

SUB CODE: NP, EN

NO REF SOV: 002

OTHER: 001

Card 3/3 *tip*

FEKTIISTOV, F.

Fabrics with artificial and synthetic fibers. Sov.
torg. 34 no.6:43-44 Je '61. (MIRA 14:7)
(Synthetic fabrics)

FEOKTISTOV, G.D.

Sillimanites in Kyakhta District from metamorphic rocks. Zap.
Vost.-Sib.otd.Vses.min. ob-va no.1:114-119 '59. (MIRA 14:7)

1. Institut geologii Vostochno-Sibirskogo filiala AN SSSR.
(Kyakhta District--Sillimanite)
(Rocks, Crystalline and metamorphic)

FEOKTISTOV, G.D.

Petrochemistry of traps in the Badarma narrows (Angara Valley).
Geol. i geofiz. no.7:105-116 '60. (MIRA 13:9)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR.
(Angara Valley---Rocks, Igneous)

FEOKTISTOV, G.D.

Materials on the petrography at traps in the region of the Badarma
narrowing (Angara River). Trudy Vost.-Sib.fil. AN SSSR
no.16:129-138 '61. (MIRA 14:?)
/ (Angara Valley--Rocks, Igneous)

FEOKTISTOV, G. I.

Doc Med Sci - (diss) "Mite-borne typhus of Northern Asia in the Irkutskaya Oblast." (Clinical and experimental study)." Leningrad, 1961. 35 pp; (Ministry of Public Health RSFSR, Leningrad Sanitary-Hygienic Med Inst); 300 copies; price not given; (KL, 6-61 sup, 235)

FEOKTISTOV, G.I.; MARKEVICH, A.A.

Clinical characteristics of typhoid fever based on materials
from Irkutsk City Infectious Diseases Hospital. Trudy Irk.
NIEM no. 7:289-299 '62 (MIRA 1961)

1. Iz Irkutskogo meditsinskogo instituta.

PHORTISTOV, G.P.

Readers' response to B.N.Liubimova's, A.V.Ivanova's and L.IA. Griger'eva's article "Planing machines constitute one of the trends in the mechanization of steping": "Ugol'" no.1, 1955. Ugol' 31 no.1:40 Ja '56. (MIRA 9:4)

1.Moskovskiy gornyy institut imeni Stalina.
(Coal mining machinery)

FEORTISTOV, G.P., aspirant

Selecting extraction methods and most satisfactory cutting depth
(width of grip) in mining thin, flat dipping seams. Nauch. trudy
MGI no.18:59-77 '57. (MIRA 11:9)
(Coal mining machinery)

FEOKTISTOV, G.P.

CHUDNOVSKIY, Yu.A.; FEOKTISTOV, G.P., gornyy inzh.

New mining systems. Part 9,10. Ugol' 32 no.9:1-3 S '57.
(MIRA 10:10)

1. Trest Stalinugol' (for Chudnovskiy). 2. Vsesoyuznyy nauchno-
issledovatel'skiy ugol'nyy institut (for Feoktistov).
(Coal mines and mining)

FRUKTISTOV, G.P., inzh.

Coal disintegration in cutting the seam with elongated bar
cutters. Izv. vys. ucheb. zav.; gor. zhur. no. 11:21-30
'60. (MIRA 13:12)

1. Institut gornogo dela Akademii nauk SSSR.
(Coal mines and mining)

BELYAYEV, V. S., kand. tekhn. nauk; FEOKTISTOV, G. P., inzh.;
BALASHOV, N. D., inzh.

Selection of methods of mechanization in mining thick seams in
mines of the Noril'sk coal deposit. Mekh. i avtom. v gornoi
prom. no. 2:42-59 '62. (MIRA 16:17)

(Noril'sk region--Coal mines and mining--Equipment
and supplies)

LEVENSON, M.B., mayor meditsinskoy sluzhby; KISELEV, Yu.M., kapitan meditsinskoy
sluzhby; FROKISTOV, G.S., kapitan meditsinskoy sluzhby

Providing vitamin C for sailors on certain vessels. Voen.-med.
zhur. no.7:77-78 J1 '59. (MIRA 12:11)

(ASCORBIC ACID)

(SAILORS (NAVY)--NUTRITION)

REF ID: A66024
EPC-2/EWC(j)/EWT(d)/FBD/FSF(h)/FSS-2/EMO(r)/EWT(1)/EEC(a)/EWP(m)/

EW/IC/WS

Hero of the Soviet Union, Aviator, COSMONAUT

... from the three-man flight of the Voskhod spacecraft

Source: *Pravda i kosmonavtika*, no. 12, 1964, 31-33

manned satellite, Voskhod series, spacecraft instrumentation, space-
 orbital orientation, satellite communication, space photography,

ABSTRACT. The author took part in the recent successful flight of the "Voskhod",
 three-man spaceship, in the capacity of scientific advisor. In the
 describes, in a popular and relatively non-technical style,
 "Voskhod" and a number of other spacecraft
 procedures. The
 of the spacecraft
 new instrumentation and
 "Voskhod" of two retro-rockets
 the author maintains that this arrangement

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L 25691-35
ACCESSION NR: AP5001809

3

of higher orbits with greater reliability. Also mentioned is the use of a new
orientation system which makes use of ion plotters of the speed vector
 the spacecraft. Ideal landing conditions were also mentioned for
 a soft-landing system. (The article also mentions the use of
 satellite navigation systems and the use of radio channels in the S-band
 for transmitting data during the start and end of the mission.)

The article of the Vostok-3 new mission system,
 was not only for TV transmission from the cabin of the vehicle to the
 Earth for transmission to the Earth of pictures taken from the
 windows in the radio DF-ing and radio-telemeter systems. It also
 contains some of the scientific program of the mission.

The article also mentions the use of the photogrammetry system
 for the study of the terrain. It is noted that the use of this system
 will be necessary before any other system can be used for
 the study of the terrain. The article also mentions the use of the
 photogrammetry system for the study of the terrain.

but little effort is made to explain them scientifically. A word picture
 of the polar lights, as observed in the Antarctic region, is also given. Also
 the various constellations which the crew were able to observe

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ACCESSION NR: AP5001809

In connection with the program for night sky observations carried out during flight, one of the problems examined was the behavior of particles in conditions of weightlessness was also examined, with particular attention being given to concrete problems of the behavior of particles in a volume cavity.

The behavior of the behavior of a liquid in a volume basically filled with small particles present on a portion of the wall of the cavity was examined. The things, that: 1) the gas "bubble" is unstable and scatters on impact, 2) under weightlessness conditions small "bubbles" do not tend to coalesce. In the author's opinion, these were particles of dust from the hull of the ship which were illuminated by the sun. Other flight information of lesser importance is given in the article. Orig. art. has: 2 figures.

None

SUBMITTED 00

NO. OF PAGES 000

ENCL: 00

OTHER: 000

SUB CODE SV, ES

FEOKTISTOV, K.P., kand.tekhn.nauk, nauchnyy sotrudnik-kosmonavt,
Geroy Sovetskogo Soyuza

In a space laboratory. Priroda 53 no. 11:6-8 '64.
(MIRA 18:1)

02860161 FRO-2/EMG(j)/FBD/FSF(h)/FSS-2/EMG(r)/EWT(1)/REC(a)/EHO(r)/

...
...
...

... Feoktistov, K. P. Student astronaut

TITLE: The development of a space laboratory with many persons on board is anticipated

SOURCE: Tekhnika-molodezhi, no. 1, 1965, 3

TOPIC TAGS: multipassenger spacecraft, orbital space laboratory, orbital space orientation, etc.

... K. P. Feoktistov, speaking of the Voskhod flight, stated that the horizon in space was studied so that it could serve as a reference plane for future spacecraft. ...
... orientation as an ...
... atmosphere, develops. Its measurement ... in the orientation of the craft. The spacecraft is the most complex of

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AP5004445

automatic machines. The most essential parts are packed up, which complicates design even more. Everything aboard the Voskhod automatically. The landing was made at a certain point in the

Voskhod could be considered a step forward since the time is not too far off when a station (with a crew of tens of scientific workers) will be built in space. [IT]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: NG, SV

NO REF SV: 000

OTHER: 000

ATD PRESS: 3178

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L 21029-66 F3S-2/EWT(1)/EEC(k)-2/EWA(d)/T IJP(c) GS/GW

ACCESSION NR: AT5023564

UR/0000/65/000/000/0062/0064

AUTHOR: Feoktistov, K. P.; Rozenberg, G. V.; Sandomirskiy, A. B.; Sergeevich, V. N.; Sonechkin, D. M. ²⁰ btl

TITLE: Optical observations from the Voskhod spacecraft

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 62-64

TOPIC TAGS: Vostok, Voskhod, haze photography, cloud photography, cyclone, anti-cyclone, gegenschein, Glenn firefly

ABSTRACT: A number of optical observations were carried out by the Voskhod crew as a followup to experiments conducted by the Vostok-series capsules. Preliminary results of the following experiments are discussed: 1) photography of the haze which blankets the Earth's limb on the daylight side; 2) color photography of the dawn with the capsule on the night side; 3) observation over the planet's limb of a weak (pale-white with a yellow-green tone) glow region extending along and 2.5-3° above the horizon, and particularly evident against the polar glow; 4) observation of small luminescent particles (dust) first reported by Astronaut John Glenn; and

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L 21029-66

ACCESSION NR: AT5023564

5) photography of the cloud cover (cyclone and anticyclone) against the water surface. (orig. art. has: 4 figures. 0
[YK]

ASSOCIATION: none

SUBMITTED: 028Sep65

ENCL: 00

SUB CODE: ES, SV

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4094



Card 2/2 BK

ACC NR: AP5023031

SOURCE CODE: UR/0384/66/000/002/0003/0005

AUTHOR: Feoktistov, K. P. (Candidate of technical sciences)

ORG: none

TITLE: Man in space

SOURCE: Zemlya i vseennaya, no. 2, 1966, 3-5

TOPIC TAGS: space program, social science

ABSTRACT: The author presents an optimistic philosophical discussion of the merits of space exploration and man's future in outer space. The article is chiefly devoted to rebutting the critics of the space program, who argue that man should first concern himself with the solution of problems on earth and leave space exploration to the future. The author points out that space research is already bearing fruit in the form of communication, navigation, and meteorological satellites. He also addresses himself to the problem of war and peace, the possible degeneration of the human race in the face of improved living standards, etc. Orig. art. has: 1 photograph.

SUB CODE: 22,05/

SUBM DATE: none

Card 1/1

SOV/156-58-3-10/52

AUTHORS: Bogdanovskiy, G. A., Feoktistov, L. G., Shlygin, A. I.

TITLE: The Behavior of Benzene on Platinized Platinum (O povedenii benzola na platinirovannoy platine)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 3, pp. 443-446 (USSR)

ABSTRACT: The adsorption of an organic substance on platinized platinum can be investigated electrochemically by measuring the potential of the adsorbed substance on the degassed surface of the electrode. The method was described in detail by Shlygin (Ref 1). The experimental results were illustrated by diagrams which are discussed. They show: Diagram 1: the charge curve in 0,1 n H_2SO_4 (1) the charge curve in 0,1 n with benzene saturated H_2SO_4 , and the charge curve in 0,1 n with benzene-saturated HCl (3). Diagram 2: the potential change in 0,1 n H_2SO_4 with the introduction of benzene into the system with the degassed platinum electrode (1), with hydrogen-saturated electrode (2) and in 0,1 n HCl (3). Diagram 3: the charge curve in 0,1 n H_2SO_4 without (1) and with benzene (2).

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The Behavior of Benzene on Platinized Platinum

SOV/156-58-3-10/52

Diagram 4: the curve of the electroreduction of benzene in 0,1 n H₂SO₄ (1) and 0,1 n HCl (2). Theoretically the electroreduction in HCl should take place more rapidly than in H₂SO₄, where the bond energy of the adsorbed hydrogen is higher. This is not the case, however, from the experimental results it may be concluded that the slow rate of electroreduction of benzene on platinized platinum is related to the presence of a double electric layer which hampers the penetration of the benzene to the electrode. There are 4 figures and 4 references, which are Soviet.

ASSOCIATION:

Kafedra elektrokhemii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova
(Chair of Electrochemistry of Moscow State University imeni M.V. Lomonosov)

SUBMITTED: January 21, 1958

Card 2/2

TYURIN, Yu.M.; FROKTIKOV, L.G.

Role of adsorbed oxygen in the process of thermal activation and
deactivation of platinum black. *Kin. i kat.* 4 no.2:221-229 *M-Ap '63.*
(MIRA 16/5)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova
i Lisehanskiy filial Gosudarstvennogo ~~prosvetnogo~~ i nauchno-issle-
dovatel'skogo instituta ~~svetnoy promyshlennosti~~.
(Platinum catalysts) (Oxygen) (Adsorption)

S/030/61/000/003/010/013
B105/B215AUTHOR: Feoktistov, L.G.

TITLE: Electrochemistry of organic compounds

PERIODICAL: Vestnik Akademii nauk SSSR, no. 3, 1961, 113 - 115

TEXT: The third conference on the electrochemistry of organic compounds was convened by the Institut elektrokhimii Akademii nauk SSSR (Institute of Electrochemistry of the Academy of Sciences USSR) and the Section of Electrochemistry of the Vsesoyuznoye khimicheskoye obshchestvo im. D.I. Mendeleeva (All-Union Chemical Society imeni D.I. Mendeleev) in Moscow, October 20, and 21, 1960. It was attended by numerous representatives of scientific and industrial organizations and schools of higher learning. The conference dealt with problems of electrosynthesis and electrochemical methods. The main task in the field of electrosynthesis is the intensification of electrolysis and the development of highly efficient electrolyzers. The most important rules governing the regeneration of hydrocarbons by conjugate double bonds, aldehydes, and ketones, halogen, nitro, and sulfo derivatives have been polarographically studied. Some reports dealt

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B105/B215

Electrochemistry of organic ...

with electrolytic preparation methods. A method of producing initial substances for the synthesis of some drugs and vitamins was worked out on the basis of the electrolytic methoxylation of furane. Data on the intensification of amalgam decomposition by carbonic acid gas under elevated pressure are of great interest for the economical utilization of sodium amalgam forming during the production of chlorine by the mercury method. Sodium formate and methylate which are formed during these processes are utilized in industry. Papers on the electric regeneration of unsaturated nitriles for the production of dinitriles of higher dicarboxylic acids were discussed. Results were given on anodic processes in methyl alcohol, and on the effect of substituents on the rate of regenerating unsaturated compounds by cathodes of catalytically active metals, and also on the mechanism of these processes. The existence of optimum temperature and conditions for forced convection in the intensification of electrolysis was shown during the discussion of general problems of the kinetics of electrodic processes. A number of papers on the electrosynthesis of monomers and other initial substances for the synthesis of high-molecular compounds were used in industry since the second conference in June 1959. The rate of development in the electrochemistry of organic compounds does not keep

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Electrochemistry of organic ...

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B105/B215

pace with industrial demands. A new specialized laboratory and design office are planned for accelerating the development and the introduction of new methods for the electrochemical synthesis. The most important task pointed out at the conference, was the intensification and stimulation of work in the polarography of organic compounds and the mechanism of electrode reaction with the participation of organic substances. The fourth conference on the electrochemistry of organic compounds is scheduled for the beginning of 1962.

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FIOSHIN, M. Ya., kand. tekhn. nauk; FEOKTISTOV, L. G.

Fourth All-Union Conference on the Electrochemistry of Organic
Compounds. Zhur. VKHO 7 no.5:568-570 '62.

(MIRA 15:10)

(Electrochemistry—Congresses)
(Chemistry, Organic)

FRUKTISTOV, L. G.; ZHDANOV, S. I.

Polarography of halogen organic compounds. Report No. 1:
Monoelectronic splitting of a carbon-halogen bond and polaro-
graphic behavior of some propionitrile halides. Izv. AN SSSR
Otd. khim. nauk no.12:2127-2132 D '62.

(MIRA 16:1)

1. Institut elektrokhimii AN SSSR.

(Propionitrile) (Halogen compounds)
(Polarography)

FEOKHISTOV, L.G.; ZHDANOV, S.I.

"Electrochemical Behaviour of β -Halogenpropionitrils."

Report presented at the 11th meeting CITCE, Intl. Comm. of
Electrochemical Thermodynamics and Kinetics, Moscow, 19-25
Aug 63.

Institute of Electrochemistry, Academy of Sciences of U.S.S.R.,
Moscow.

FIOKTISTOV, L. G.; ZHDANOV, S. I.

Polarography of halogen organic compounds. Report No. 2:
Establishing the stoichiometry of reactions by means of latent
limiting currents. Izv. AN SSSR. Otd. khim. nauk no.1:45-52
'63. (MIRA 16:1)

1. Institut elektrokhemii AN SSSR.

(Halogen organic compounds) (Polarography)

ZHDANOV, S. I.; FEONTISTOV, L. G.,

Problem of the reducing dimerization of acrylonitrile on a mercury electrode. Izv. AN SSSR. Otd. khim. nauk no.1:53-57 '63. (MIRA 16:1)

1. Institut elektrokhemii AN SSSR.

(Acrylonitrile) (Polymerization)
(Reduction, Electrolytic)

FEORTISTOV, L.G.; TOMILOV, A.P.; GOL'DIN, M.M.

Conjugated electrochemical cleavage of halogen compounds. Izv. AN SSSR.
Ser.khim. no.7:1352 J1 '63. (MIRA 16:9)

1. Institut elektrokhemii AN SSSR.
(Halogen compounds) (Reduction, Electrolytic)

KHAYKIN, B.I.; FEOKTISTOV, L.G.

Limiting current in the case of deactivation of the electro-
active substance by the product of electrochemical reaction.
Zhur. fiz. khim. 38 no.3:547-550 Mr '64. (MIRA 17:7)

1. Institut elektrokhemii AN SSSR.

FEOKTISTOV, L.G.; TOMILOV, A.P.; SMIRNOV, Yu.D.; GOL'DIN, M.M.

Nature of the cathodic breaking of the carbon-halogen bond. Elektro-
khimiia 1 no.8:887-893 Ag '65. (MIRA 18:9)

1. Institut elektrokhemii AN SSSR.

PEOKTISTOV, L.G.; TOMILOV, A.P.; SEVAST'YANOVA, I.G.

Relation between the acrylonitrile electroreduction products and
the proton-donor properties of solution. Elektrokimiia 1 no.10:1300-
1303 0 '65. (MIRA 18:10)

1. Institut elektrokimii AN SSSR.

FEOKTISTOV, L. I. kand. sel'skokhoz. nauk

Book with serious defects ("Sterility in farm animals" by I.A.
Bocharov. Reviewed by L.I. Feoktistov). Zhivotnovodstvo 21 no.5:
92-94 My '59. (MIRA 12:7)
(Sterility in animals)

GOLUBEV, N., kand.tekhn.nauk; STERLIN, Ye., kand.tekhn.nauk; FEOKTISTOV, M.; BREKHOV, A.; SIMAKIN, V.; KOZLOVA, L., tkachikha; NIKONOVA, K.; CHERTKOV, L.; SLUTSKIN, S.; MINAYEV, I., inzh.

Introducing a new organization of work; letter to the editor. Tekst.prom. 19 no.12:18 D '59. (MIRA 13:3)

1. Direktor Novo-Tkatskoy fabriki Glukhovskogo kombinata imeni V.I.Lenina (for Feoktistov).
2. Zaveduyushchiy 1-y tkatskoy fabrikoy kombinata "Vozhd' proletariata" (for Brekhov).
3. Nachal'nik tkatskogo proizvodstva fabriki im.M.V.Frunze (for Simakin).
4. Fabrika im. Frunze (for Kozlova, Nikonova).
5. Zaveduyushchiy normativno-issledovatel'skoy laboratoriyey po trudu fabriki im. M.V.Frunze (for Chertkov).
6. Zaveduyushchiy normativno-issledovatel'skoy laboratoriyey ramenskogo kombinata "Krasnoye Znanya" (for Slutskin).
(Weaving)

FEOKTISTOV, M.

The RPKO-10M link trainer. Kryl.rod. 14 no.1:24 Ja '63.
(MIRA 16:1)

1. Starshiy instruktor-metodist Khar'kovskogo aerokluba.
(Link trainers)

FEOKTISTOV, P.I., kand.veter. nauk

Diseases of the embryos and the young of poultry. Veteri-
naria 37 no.4:66-70 Ap'60. (MIRA 16:6)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.
(PCULTRY—DISEASES AND PESTS)

KOVALENKO, Ya.R.; FOMINA, A.Ya.; FEOKTISTOV, P.N. [deceased]; AKULOV,
A.V.; MITROPOL'SKIY, A.S.; SHUBIN, V.A.

Observations on the course of the chronic respiratory disease in
chickens. Veterinaria 37 no.12:34-42 D '60. (MIRA 15:4)
(Poultry--Diseases and pests) (Respiratory organs--Diseases)
(Mycoplasma gallinarum)

FEOKTISTOV, P. N.

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PHASE I BOOK EXPLOITATION

SOV/6333

Bochkarev, V. V., ed.

Tekhnika izmereniye radioaktivnykh preparatov; sbornik statey (Techniques for the Measurement of Radioactive Preparations; Collection of Articles) Moscow, Gosatomizdat, 1962. 4600 copies printed.

Eds.: A. M. Smirnova and M. A. Smirnov; Tech. Ed.: S. M. Popova.

PURPOSE: This book is intended for specialists in nuclear instrumentation.

COVERAGE: The book is a collection of articles on recent developments in 1) measurement of the activity and 2) analysis of the composition of emissions of radioactive preparations. The methodology and apparatus used in these studies are described in detail. References are given at the end of each article.

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Techniques for the Measurement (Cont.) SOV/6333

Turkin, A. D. Measurement of the Concentration of β -Emitting Gases and the Determination of Their Isotopic Composition by Means of Spherical Ionization Chambers 134

Lavrenchik, V. N. Measurement of the γ - and β -Activity of Aerosols 139

Ivanov, Yu. F., K. N. Shlyagin, and P. N. Feoktistov. Magnetic β - and γ -Spectrometer 156

Ivanov, Yu. F., I. A. Rumer, and K. N. Shlyagin. Magnetic Spectrometer BPP-3 168

Bazhenov, B. A., Yu. M. Golubev, K. N. Shlyagin, P. N. Feoktistov, and G. V. Yakovlev. Scintillation γ -Spectrometer With a Multichannel Analyzer and a Unit for the Automatic Plotting of Spectra 182

Bazhenov, V. A., Yu. M. Golubev, and K. N. Shlyagin. Scintillation Spectrometer Counter With Allowance for Dead-Time Effect 202

Card 4/5

FEOKTISTOV, R. (Moscow)

Tuning intermediate frequency filters of a superheterodyne to
460 kilocycles. Radio no.12:36 D '54. (MLRA 8:1)
(Electric filters)

FEOKTISTOV, S. YE.

28/49T56

USSR/Engineering
Peat Industry
Insulation, Electric

Oct 48

"Apparatus for Insulation Control," S. Ye. Feoktistov, Chief Power Engr, Shatuzskiy Trust, 1 p
"Trif Prom" No 10

Section 348 of Operating Directions for Equipment at Peat Enterprises states that all equipment must have system for controlling grounding. Section 430 states that all low-voltage equipment must have a signaling system which would be activated immediately when a short circuit to the ground

28/49T56

USSR/Engineering (Contd)

Oct 48

occurs. Presents system to maintain insulation in high-voltage three-phase equipment. System involves a one-phase transformer and voltmeter.

28/49T56

AUTHORS: Nelipa, N. F., Feoktistov, V. A. SOV/56-35-1-33/59

TITLE: On the Problem of the Polarization of Recoil Nucleons in the Photoproduction of $\bar{\pi}$ -Mesons (K voprosu o polarizatsii nuklonov ot dachi pri fotoobrazovanii $\bar{\pi}$ -mezonov)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol. 35, Nr 1, pp. 244-248 (USSR)

ABSTRACT: The theoretical investigation of the problems connected with the determination of the polarization of recoil nucleons is, in principle, carried out according to two methods: By the application of the density matrix (Ref 1) and by the phenomenological scattering theory with application of the S-matrix (Ref 2). In the present paper the endeavor is made to derive a general formulation for P (polarization of recoil nucleons) by the aid of the S-matrix. In contrast to reference 3 the representation of P is even more general. The laws of the conservation of parity and of momentum serve as a basis of derivations. As an example the case of the polarization for the production of pions in s-, p-, and d-states is dealt with. If the d-state is not taken into account, the formulation of P used here goes over into the expression by Feld (Fel'd)

Card 1/3

On the Problem of the Polarization of Recoil
Nucleons in the Photoproduction of \bar{N} -Mesons

SOV/56-35-1-33/59

(Ref 4). The reaction $\gamma + N \rightarrow N' + \bar{N}$ is investigated and for

$$P = (d\sigma_+ - d\sigma_-)/(d\sigma_+ + d\sigma_-)$$

is set up. $d\sigma_+$ and $d\sigma_-$ are the differential cross sections of the photoproduction of mesons. For the case of E_{11} , E_{13} , M_{11} , M_{13} , E_{23} , M_{23} , M_{25} and E_{35} - transitions a complicated formula (13), which extends over 7 lines, is derived for P , which goes over into Feld's formula for

$$E_{13} = M_{23} = M_{25} = E_{35} = 0.$$

There are 1 table and 9 references, 3 of which are Soviet.

ASSOCIATION: Fizicheskiy institut im. P.N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P.N. Lebedev, AS USSR)

SUBMITTED: February 24, 1958

Card 2/3

3(4)

AUTHOR:

Feoktistov, V. A.

SOV/6-59-4-3/20

TITLE:

The Building of Assembled Triangular Signals
(O postroyke slozhnykh trekhgrannykh signalov)

PERIODICAL:

Geodeziya i kartografiya, 1959, Nr 4, pp 13-14 (USSR)

ABSTRACT:

Squad Nr 108 of the Kazakhskoye aerogeodezicheskoye predpriyatiye (Kazakh Aerogeodetical Enterprise) was very short of timber in 1958. For this reason, it was decided to build assembled triangular signals. 9 such signals were built in all, one with a height of 25 m, one of 15 m, and seven of 18-20 m. Thus, the consumption of timber decreased by 25 %. Except for the one 25 m high, the signals were assembled on the ground and then lifted. The signals were elevated with a 3-ton cable winch and a cable of 16 mm diameter and 300 m long. The erection of these signals is here described in detail. Experiences made in 1958 showed that a building brigade of 10 men can mount three signals 20 m high and one 25 m high within 30 days. The measurement of the angles of the assembled triangular signals showed that these signals were sufficiently stable.

Card 1/1

FEOKTISTOV, V.A.

PHASE I BOOK EXPLOITATION

SOV/5717

Moscow. Inzhenerno-fizicheskiy institut.

Pribory i metody analiza izlucheniya; sbornik nauchnykh rabot, vyp. 2. (Apparatus and Methods for the Analysis of Radiation; Collection of Scientific Papers, no. 2) Moscow, Atomizdat, 1960. 166 p. 4000 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR. Moskovskiy inzhenerno-fizicheskiy institut.

Ed. (Title page): Ye. L. Stolyarova, Candidate of Physics and Mathematics;
Tech. Ed.: S. M. Popova.

PURPOSE: This collection of articles is intended for specialists in nuclear physics, dosimetry of nuclear radiations, and shielding.

COVERAGE: The articles were prepared by scientists of MIPI (Moscow Physics and Engineering Institute) and presented at the 1957 conference of the Institute. Brief annotations to the articles have been included in the Table of Contents. No personalities are mentioned. References follow each article.

Card 1/2

Apparatus and Methods for the Analysis (Cont.)

SOV/5717

Stolyarova, Ye. L., and G. G. Doroshenko. Delayed Coincidence Unit for Measuring Time Intervals of 10^{-10} - 10^{-7} sec.

144

This unit has greater possibilities than other known units. Use of pentodes with secondary emission under special conditions permits blocking of the limiter with one photoelectron from the photocathode. The characteristic impedance of the delay line (150 instead of the usual 92 ohm) enhances the amplitude of the pulse for the incidence selection. At resolving time $2\tau = 2.5$ nsec the recording efficiency is 60%.

Nelipa, N. F. and V. A. Feoktistov. Determination of Small-Phase π -Meson Scattering by Nucleons

155

A general equation is given for the polarization of recoil nucleons emerging during the formation of π -mesons by photons.

Irodov, I. Ye. Resolving Power of Analyzers With a Radially Symmetric Magnetic Field

157

Problems relating to the resolving power of analyzers are discussed.

Card 7/8

NELIPA, N.F.; FEOKTISTOV, V.A.

Determining small scattering phases of π -mesons on nucleons.
Sbor. nauch. rab. MIFI no. 2:155-156 '60. (MIRA 14:3)
(Mesons—Scattering)

PERAPONTOV, V.A.; BALANDIN, A.A.; TOLSTOPYATOVA, A.A.

Catalytic dehydrogenation of ethylbenzene to styrene on
cadmium oxide in the presence of water vapors. Izv. AN SSSR. Otd.
khim. nauk no. 3:414-423 Mr '63. (MIRA 16:4)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Benzene) (Styrene)

120111-00V, V-1

USSR/Soil Science - Mineral Fertilizers.

J.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15333

Author : V.I. Feoktistov

Inst :

Title : Organization of the Agricultural Chemistry Service in the Latvian SSR.
(Organizatsiya agrokhimicheskoy sluzhby v Latviyskoy SSR).

Orig Pub : Udobreniye i urozhay, 1957, No 7, 50-53

Abstract : No abstract.

Card 1/1

41

MAL'KEVICH, L.P.; FEOKTISTOV, V.G., inzh.

Results of the experimental operation of composition brake shoes by the Northern Caucasus Railroad. Vest. TSNII MPS 20 no.6:27-30 '61. (MIRA 14:10)

1. Nachal'nik Severo-Kavkazskoy dorogi (for Mal'kevich).
2. Severo-Kavkazskaya zheleznaya doroga.
(Caucasus, Northern--Railroads--Brakes)

42119

S/109/62/007/010/006/012'
D266/D308

9.1300

AUTHOR: Feoktistov, V.G.
 TITLE: Diffraction model of the Y circulator
 PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 10, 1962,
 1763 - 1768

TEXT: The waveguide junction is replaced by a semi-infinite space which contains the ferrite rod. The electric field is expressed in the usual form

$$E_x^0 = -\frac{\partial}{\partial x} \int_{-\infty}^{+\infty} \int_{-1/2}^{1/2} \frac{e^{-j\kappa_0 r}}{2\pi r} E_x(z', y') ds' dy', \quad E_x^0 = E_y^0 = 0. \quad (2)$$

where

$$r = \sqrt{(y-y')^2 + (z-z')^2 + x^2}; \quad \kappa_0 = \frac{2\pi}{\lambda_0}$$

x, y, z - coordinates of the observation point, z', y' - coordinates of a point in the aperture. Taking the electric field in the aperture as $E_z(z', y') = \cos \mathcal{N} y'$ integrating (2) analytically with

Card 1/2

Diffraction model of the Y circulator

S/109/62/007/010/006/012
D266/D308

respect to z' , and numerically with respect to y' the field at the ferrite rod is found. Using then the formula derived by V.V. Nikolskiy (Radiotekhnika i elektronika, 1958, 3, 6, 756) the field scattered by the ferrite rod is determined. The non-reciprocity of the device is measured by introducing the parameter

$$\overline{\Delta P} = \frac{P_1 - P_2}{P} \quad (1)$$

where P - total power, P_1 - power crossing S_1 , P_2 - power crossing S_2 . Plotting $\overline{\Delta P}$ as a function of k (off-diagonal element in the permeability tensor) with parameters μ (diagonal element), $2\pi R/\lambda_0$ (R - radius of the ferrite rod) and ϵ (dielectric constant). It is found that $\overline{\Delta P}$ can reach values up to 0.9 and the higher μ the larger is k where the maximum of $\overline{\Delta P}$ occurs. If ϵ decreases, the maxima become wider reducing the tolerance requirement on the parameters of the ferrite. It is shown furthermore that certain choices of the parameters will make $\overline{\Delta P}$ independent (in first order) of wavelength or temperature. There are 9 figures.

SUBMITTED: November 16, 1961

Card 2/2

ANDREYEV, Yu.N.; DZYURENKO, M.S.; FEKTISTOV, V.I., redaktor.

[Physics in modern medicine] Fizika v sovremennoi meditsine. [Leningrad]
Medits. Leningradskoe otd-nie, 1953. 162 p. (MLRA 7:6)
(Medicine, Physiomedical)

PHOKTISTOV, V.I.; LILENKO, S.I., redaktor; RULOVA, M.S., tekhnicheskiy
redaktor

[Metrical properties of X-ray pictures and their application to
X-ray diagnosis] Metricheskie svoistva rentgenovskogo izobrazhenia
i ikh primenenie v rentgenodiagnostike. [Leningrad] Gos. izd-vo
med. lit-ry, Leningradskoe otd-nie, 1954. 116 p. (MIRA 7:9)
(Radiography)

AGLINTSEV, Konstantin Konstantinovich; FEOKTISTOV, V.I., redaktor; HULEVA,
M.S., tekhnicheskiy redaktor

[Principles of ionizing radiation dosimetry] Osnovy dozimetrii
ioniziruiushchikh izluchenii. Leningradskoe otdelenie, Gos. izd-
vo meditsinskoi lit-ry, 1954. 287 p. (MLRA 8:5)
(X-Rays) (Radioactivity)

KACHUR, L.A.; MANOYLOV, S.Ye.; POBEDINSKIY, M.N.; PROTAS, L.R.; FEOKTISTOV, V.I.;
SHESHINA, G.A.

Relation of age to urinary excretion of radioactive potassium in
humans. Med. rad. 4 no.3:42-43 Mr '59. (MIRA 12:7)

(POTASSIUM, radioactive,

in urine, age factor (Rus))

(AGING, effects,

on urinary radiopotassium (Rus))

FEOKTISTOV, V.I., prof

"Physical basis of X-ray diagnosis" [in German] by H.R.
Spiegler. Reviewed by V.I.Feoktistov. Vest.rent. 1 rad.
34 no.3:86-87 My-Je '59. (MIRA 12:10)
(DIAGNOSIS, RADIOSCOPIC) (SPIEGLER, H.R.)

FEKTISTOV, Vissarion Ivanovich; AGLINTSEV, K.K., red.; RULEVA, M.S.,
tekh.red.

[Principles of medical radiology; practical reference book]
Osnovy meditsinskoi radiologii; prakticheski spravochnik.
Leningrad, Gos.isd-vo med.lit-ry Medgiz, 1960. 163 p.
(MIRA 14:4)

(RADIOLOGY, MEDICAL)

87875

9.6150
218100

S/146/60/003/006/012/013
B012/B060

AUTHORS: Feoktistov, V. I., Gasilova, Ye. B., Palladiyeva, N. M.

TITLE: Ionization and Scintillation Method for the Detection of Radioactive Contamination of Various Surfaces

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, 1960, Vol. 3, No. 6, pp. 111 - 119

TEXT: A comparison is given here of the results obtained when using special ionization chambers or a scintillation instrument for the estimation of radioactive substances on different surfaces, among which also a biological tissue. The artificial contamination of the various surfaces was imitated by means of isotopes of almost equal energy. The measuring instruments used were a condenser-dosimeter and a scintillation system for laboratories. The condenser-ionization dosimeter was used for the direct measurement of the gamma-radiation dose and the density of the activity of beta-active isotopes. It is pointed out that the determination of the activity density of gamma-active isotopes and of the beta-radiation dose require a prior determination of the dimensions of

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Ionization and Scintillation Method for the S/146/60/003/006/012/013
Detection of Radioactive Contamination of B012/B060
Various Surfaces

the contaminated surface. The ordinary C4-4 (Sch-4) apparatus was improved to suit the scintillation method. More precisely, the circuits of the photomultiplier feed and of the pre-amplifier were modified. This fact offered the possibility of augmenting the sensitivity of the instrument to the required degree. A rectifier with semiconductor diodes of the ДГЦ (DGTs) type and a microammeter were connected at the output to measure the integral amperage of the photomultiplier. A stilbene crystal 35 mm in diameter served as a detector. Summing up: The scintillation method tested on biological objects and control amplifiers is found to ensure a sufficiently high sensitivity. This sensitivity permits measuring a contamination level amounting to ten times the "admissible" activity density. The same sensitivity is also ensured by the ionization method tested on applicators. At a time of measurement of 1 to 10 minutes the ionization method ensures a measured dose power range of 1.5 mr/min to 840 mr/min. The activity densities measured amounted to δ_{β} - from 0.025 to 25 microcurie/cm² and δ_{γ} - from 0.05 microcurie/cm² on. The scintillation apparatus offers the

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Ionization and Scintillation Method for the S/146/60/003/006/012/013
Detection of Radioactive Contamination of B012/B060
Various Surfaces

possibility of performing instantaneous readings, which are then re-calculated in doses. The measurement limits for gamma radiation range between 0.21 and 2340 microroentgens per second for a minimal contamination of 0.4 microcurie/cm². The range of measurement for beta radiation is between 0.09 and 130 microroentgens per second for a minimal contamination of 0.01 microcurie/cm². The publication of this article was recommended by the kafedra tekhniki bezopasnosti LETI (Department of Industrial Safety LETI). There are 5 figures and 2 non-Soviet references. ✓

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut
meditsinskoy radiologii (Central Scientific Research
Institute of Radiological Medicine)

SUBMITTED: March 21, 1960

Card 3/3

FEDOROVA, I.V.; FEOKTISTOV, V.I.

Thin photosensitive layers for obtaining autoradiograms of
bacterial objects studied with the electron microscope.
Med.rad. no.7:73-77 '61. (MIRA 15:1)

1. Iz radiologicheskogo otdela Tsentral'nogo nauchno-issledovatel'-
skogo instituta meditsinskoy radiologii.
(AUTORADIOGRAPHY--EQUIPMENT AND SUPPLIES) (ELECTRON MICROSCOPE)
(BACTERIOLOGY)

FEDOROVA, I.V.; FEOKTISTOV, V.I.

Preparation of thin photosensitive emulsion films for electron
microscopes. Zav.lab. 28 no.7:823-825 '62. (MIRA 15:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy
radiologii.

(Electron microscopy)

(Films (Chemistry))

FEOKTISTOV, V.K.

ZAYONCHKOVSKIY, A.D.; YABKO, Ya.M.; MIKHAYLOV, N.A.; FEOKTISTOV, V.K.;
SHMERLING, B.M.; BERNSTEYN, M.Kh.; GUS'KOV, F.G.; PARAMONOV, V.G.;
GLUZMAN, G.M.; GRIGORIADI, M.T.

Polyamide treatment of imitation kidskin and flesh layer splits.
Leg.prom. 16 no.10:22-26 0 '56. (MIRA 10:12)
(Hides and skins) (Amides)

KOCHURAYEV, L.D.; KUPRIYANOV, Yu.V.; FEOKTISTOV, V.M.; MAVDRIKOV, F.I.

Eight-axle main line a.c. locomotive N81. Sbor. nauch. trud. ENII
3:15-21 '63. (MIRA 17:4)

FEOKTISTOV, V. N.

Dissertation: "Effect of the Content of Chromium Oxide on the Physicomechanical and Operational Properties of Sole Leather of Chromium-Vegetable-Santonone Tanning." Cand Tech Sci, Moscow Inst of National Economy imeni G. V. Plekhanov, 28 May 54. Vechernyaya Moskva, Moscow, 19 May 54.

SO: SUM 284, 26 Nov 1954

FEOKTISTOV, V.N.; LANEYEVA, N.S.; MATVEYEV, V.V.; RYVKIN, S.B.

Recent developments in testing shoe materials for multiple bending.
Kazh.--obuv. prem. no.5:24-27 My '59. (MIRA 12:6)
(Boots and shoes--Testing)

FEOKTISTOV, V.N.; LANEYEVA, N.S.; RYAZANTSEVA, L.V.

Determining waterproofness of raincoat fabrics. Standartizatsia 28 no.2:40-44 F '64. (MIRA 17:3)

BOGDANOV, Yu.V.; KOCHIN, G.G.; KUTYREV, E.I.; TRAVIN, L.V.;
FEOKTISTOV, V.P.

Geology, characteristics of the distribution and conditions
governing the formation of cuprous sandstones in the north-
eastern part of the Olekma-Vitim highland. Sov.geol. 8 no.11:
3-18 N '65. (MIRA 1961)

ACC NR: AP6021793 (A, N) SOURCE CODE: UR/0413/66/000/012/0057/0058

INVENTOR: Feoktistov, V. P.

ORG: none

TITLE: A device for the protection of a rectifying installation. Class 21, No. 182794

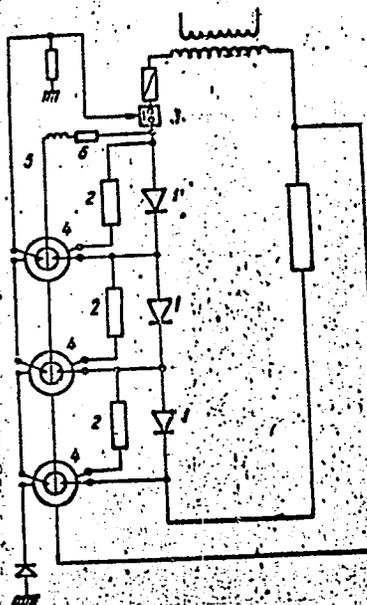
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 57-58

TOPIC TAGS: electronic rectifier, ferrite switch, circuit design

ABSTRACT: This Author Certificate presents a device for the protection of a rectifying installation with series-connected power rectifiers. The device contains equalizing resistors connected in parallel to each rectifier, and a disconnecting apparatus (see Fig. 1). The design increases the reliability and response time of the device. The input winding of a magnetic element with a ferrite core is connected in parallel with the equalizing resistor of each rectifier. The output windings of all the elements are connected in series to the circuit of the disconnecting apparatus. All the cores are connected to the control tie line which is connected (through a limiting resistor) to the power supply network.
Card 1/2 UDC: 621.316.9:621.314.632

AGC NR: AP6021793

Fig. 1. 1 - power rectifiers; 2 - equalizing resistors; 3 - disconnecting apparatus; 4 - magnetic elements; 5 - control tie line; 6 - limiting resistor



Orig. art. has: 1 figure.
SUB CODE: 09/ SUBM DATE: 08May65
Card 2/2

KRASNOV, K.S.; LOBANOV, G.A.; FEOKTISTOV, V.S.

Electric conductivity of triphenylmethane series dyes in
isobutyl alcohol. Izv.vys.ucheb.zav.; khim.i khim.tekh. 8
no.4:579-582 '65. (MIRA 18:11)

1. Ivanovskiy khimiko-tekhnologicheskii institut, kafedra
fizicheskoy i kolloidnoy khimii.

L 60837-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5017670

UR/0109/65/010/007/1325/1327
539.293.011.43

22
B

AUTHOR: Goryunov, N. N.; Ovechkin, Yu. A.; Savchenko, A. M.; Stankova, A. V.;
Tolkacheva, Ya. A.; Feoktistov, Yu. F.

TITLE: Investigation of secondary punch-through in transistors

SOURCE: Radiotekhnika i elektronika, v. 10, no. 7, 1965, 1325-1327

TOPIC TAGS: transistor punch through, secondary punch through, transistor break-down, alloy transistor, diffusion alloy transistor, germanium transistor/P16 transistor, P16 transistor

ABSTRACT: The phenomenon of secondary punch-through was investigated in alloy germanium transistors and diffusion-alloy germanium transistors. The transistors were altered to impair heat transfer from the collector junctions in order to aid the development of secondary punch-through. A rectangular current pulse with a height of 0.05-1.0 amp and a duration of 0.1-1.5 msec was fed through the transistors. The base terminal was not connected in the circuit, and the voltage between the collector and emitter was observed with an oscillograph. In a majority of the transistors tested, a sudden drop in voltage occurred at the instant of secondary punch-

Card 1/2

L 60837-65

ACCESSION NR: AP5017670

through 5-20 μ sec after the start of the current pulse. In some of the specimens, the voltage drop occurred twice, with collector-emitter voltage dropping to 8-30 v and then to 2-5 v. The first drop corresponded to the development of secondary punch-through; the second was ascribed to "tertiary" punch-through which is the result of the sequential formation of two or more channels of local heat breakdown similar to the sequential "igniting" of microplasma regions during the breakdown of nonhomogeneous junctions. The effect of a 15-koe magnetic field on the development of secondary punch-through was also studied. It was found that the delay time in alloy transistors varies greatly when the magnetic field intensity and orientation are varied. When the magnetic field was perpendicular to the collector-emitter axis, delay time increased several times. If a pulse duration is chosen which is shorter than the delay time at a certain value of magnetic field intensity, the punch-through state in the transistor may be turned on and off by varying the magnetic field. The orientation of the magnetic field had no marked effect on the values of diffusion-alloy transistors. Orig. art. has: 2 figures. [DW]

ASSOCIATION: none

SUBMITTED: 19Mar64

ENCL: 00

SUB CODE: EC

NO REF SOV: 000

OTHER: 003

ATD PRESS: 4063

Cord 2/2 *jk*

20(1), 25(5)

AUTHOR:

~~Feoktistov, Yu. V.~~, Chief Engineer
of the "Manometr" Factory

SOV/119-59-1-2/20

TITLE:

Socialist Duty of the Factory "Manometr" (Sotsialisticheskiye obyazatel'stva zavoda "Manometr")

PERIODICAL:

Priborostroyeniye, 1959, Nr 1, pp 3-4 (USSR)

ABSTRACT:

It is pointed out that already some time ago the factory "Manometr" succeeded in introducing the 7-hour working-day; the same production index was maintained and the workers were paid the same wages as before. It was only possible to achieve this aim by an increase of the total output by 14.3%. This increase is due to measures of rationalization and part automation. 300 measures of rationalization were suggested in the factory. The result was: 1000 working-hours less and a profit of 4 1/2 million rubles. The following suggestions deserve above all being mentioned: The simplified charge of secondary devices of the type EPD, EMD, EPID (suggested by Cherkasskiy); foreman Sosnovskiy worked out a new method of constructing scales of electric apparatuses. Mikhalochkin, a locksmith worked out a new method by means of which it is possible to

Card 1/3

Socialist Duty of the Factory "Manometr"

SOV/119-59-1-2/20

produce circular holes in silicate glass; thus an annual profit of 56,000 rubles was achieved. Mikhailochkin, won the first prize and in addition to that was awarded money on the occasion of a competition of young specialists in rationalization. In this competition the factory "Manometr" as a collective was second. Smirnov, a locksmith, submitted 16 suggestions, Vas'kov, head of the department for automation 17 and foreman Shorokhov 13. Thanks to these suggestions the time necessary for the construction of a potentiometer, type EPI-12 was reduced from 175.9 to 88.1 hours and that of the bridge EMD-212 from 151.8 to 78 hours. In 1957 the factory employed 150 new workers, 300 were trained to do qualified work and 30 members were trained for the engineering staff. In 1958 86 turners, cutters etc. were trained and 27 engineers achieved a higher qualification. At the moment the factory has an output of more than 570 different apparatuses in the manometer department and more than 2000 in the department for electronic apparatuses. Altogether more than 10,000 standardized parts are produced. Shifman, a locksmith, suggested the introduction of a semiautomatic machine for the rough grinding of tungsten contacts; the output became twice as high

Card 2/3

Socialist Duty of the Factory "Manometr"

SOV/119-59-1-2/20

as before. At present an automatic hardening plant for steel springs is being erected which was worked out by VNITIPribor by order of the factory. An automatic machine is being installed for the purpose of testing 3 parameters of a pinion. The automatic machine tests 1200 pieces per hour and thus replaces 6 workers. The introduction of a shell constructed by Soskov permits a considerable cut of the time required for the production of grippers. In order to bring about an accelerated gripping in a turret lathe Engineer Olovovskiy's pneumomechanical shell was introduced. Engineer Dobkin developed a special device by means of which it is possible to investigate the motion of a membrane. Already on October 14, the factory "Manometr" had satisfied the standards fixed for the first 10 months of 1958 and the annual standards on December 8. On the occasion of the All-Union Exhibition 1958 the factory was awarded with a diploma of the second class for the production of apparatuses for automatic control of heat processes. The intensified Socialist competition proved to be particularly fruitful in the year 1958.

Card 3/3

5(4)

SOV/69-21-4-4/22

AUTHOR: Vasserman, P.I., Kolotyркиn, Ya.M., Chebotarevskiy, V.V.,
Feoktistova, A.A. (Moscow)

TITLE: The Properties of Paint and Lacquer Coatings as Character-
ized by Their Electrical Resistance and Capacitance

PERIODICAL: Kolloidnyy zhurnal, Vol XXI, 1959, Nr 4, pp 392-397, (USSR)

ABSTRACT: The authors report on experiments intended to characterize
the structure and moisture-proof properties of certain metal
coatings by their electrical resistance and capacitance. The
measuring of the electrical resistance was carried out with an
alternating-current bridge, the scheme of which is illustra-
ted in figure 1 (diagram). The coating materials (perchloro-
vinyl, nitrocellulose, butylmetacrylate, ethylcellulose) were
in the form of thin films (30 - 35 μ) on metal, and in a free
state. The way they were used during the experiments is
likewise illustrated in figure 1. Figure 2 (graph) shows
measuring results concerning the resistance of a nitrocellu-
lose film and the capacitance of the system: platinum electrode-

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solution-film-solution-platinum electrode. The results were obtained at a frequency of 1 kilocycle after various time intervals. Previously the film had been immersed into an NaCl solution. The results show that after initially high values, the electric resistance of the film weakens due to a growing liquid absorption, whereas the capacitance of the system is on the increase. Experiments with the above-mentioned materials were carried out to ascertain the dependence of resistance and capacitance on the nature of the film-forming substance. The results are listed in a special table. Figure 3 (graph) shows the effect of alternating current frequency on the electrical resistance of coating films. In most cases the resistance weakens in inverse proportion to the increase of frequency. Film structure, however, exercises a considerable effect on this dependence. The resistance of less compact films weakens to a lower degree than the resis-

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tance of compact films. Figure 4 (graph) shows that the effect of frequency on electric resistance grows weaker in proportion to the growth of liquid absorption by the film. Figures 5 and 6 show the effect of electrolytes on the electrical resistance of a film and the capacitance of the system (ethylcellulose film in both cases). The resistance and capacitance values are lower in distilled water than in an NaCl solution. Discussing the results of their investigation the authors conclude that the establishment of a direct correlation between electrolyte concentration and film structure on the one hand and electric conductivity of the film on the other hand is not admissible. A comparison of the data obtained in NaCl solution and in distilled water shows that such a direct correlation does not exist even at the time of the immersion of the film into the liquid. The authors assume that the so-called surface conductivity plays an important role in the conductivity of the films. In this case

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the total conductivity of the film immediately after immersion can be determined by two components: $K_{\Sigma} = K_1 + K_2$. K_1 is the electric conductivity of the electrolyte in the pores, and K_2 the pore surface conductivity. According to the investigations of I.I. Zhukov and other scientists, the specific weight of surface conductivity in the total conductivity of the film considerably increases at a reduction in pore dimension and a lowering of electrolyte concentration. In dependence on the swelling of the film in the electrolyte, a third component appears, which is due to the conductivity of the film body. In case the equation will have the form $K_{\Sigma} = K_1 + K_2 + K_T$. K_T is the conductivity of the film body. The results of the investigation can be summarized as follows: a relation between the electric resistance, the vapor permeability and the lyophilic properties of metal coatings has been established. Films with low vapor permeability which swell badly in water

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are characterized by high electric resistance. The electric conductivity of a coating film is of three components: conductivity of the electrolyte in the pores, surface conductivity in the pores and conductivity of the film body. The conductivity of a film depends on the alternating-current frequency, which, evidently, is due to a change in the surface conductivity in the film pores. There are 5 graphs, 1 diagram, 1 table and 10 references, 4 of which are English, 3 Soviet and 3 German.

SUBMITTED: 7 February, 1958.

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VASSERMAN, P.I.; CHEBOTAREVSKIY, V.V.; Primalni uchastiye: FEOKTISTOVA,
A.A.; NOVIKOVA, G.I.; BRATYSHEV, V.L.

Determination of the insulative characteristics of lacquer-
paint coatings based on their ohmic resistance. Lakokras.mat.
i ikh prim. no.2:35-44 '61. (MIRA 14:4)
(Protective coatings)

BIELKINA, G.L.; KUROYEDOV, V.A.; LAPOVOK, V.I.; LIKHTEROV, I.M.; MERMEL'SHTEYN,
G.R.; OVCHARENKO, Ye.Ya.; PONOMAR', V.I.; SABAYEV, V.I.; SOTNIKOV, V.A.;
FAYNBERG, L.I.; FEOKTISTOVA, N.D.

X-ray spectral analysis of brass in the process of smelting.
Zav.lab. 31 no.4:427-428 '65.

(MIRA 18:12)

1. Konstruktorskoye byuro "TSvetmetavtomatika" i Artemovskiy
zavod tsvetnykh metallov im. E.I.Kviringa.

S/181/63/005/001/063/064
B104/B186

AUTHORS: Ablova, M. S., and Feoktistova, N. N.

TITLE: Anisotropy of the microhardness of InSb

PERIODICAL: Fizika tverdogo tela, v. 5, no. 1, 1963, 364-365.

TEXT: The microhardness of an InSb single crystal with a resistivity of $\rho \approx 0.006 \text{ ohm}\cdot\text{cm}$ and a carrier concentration of $n = 3 \cdot 10^{16} \text{ cm}^{-3}$ was determined in the crystallographic planes (111), (112), (100) and (110). The surfaces were polished mechanically and 100 measurements were conducted with a PMT-3 (PMT-3) device at a load of 50 g per sample surface. Results:

Plane	$(\bar{H} \pm p) \text{ kg/mm}^2$
(111)	233 ± 1.4
(112)	231 ± 1.4
(100)	224 ± 1.4
(110)	222 ± 1.4

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Anisotropy of the microhardness...

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B104/B186

Nine out of ten measurements fall within the intervals given in the table. The anisotropy is equal to that of Ge and is related to the slip plane (111) and the slip direction [110]. There are 1 figure and 1 table.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors AS USSR, Leningrad)

SUBMITTED: October 9, 1962

Card 2/2

ACCESSION NR: AP4011747

S/0181/64/006/001/0116/0122

AUTHORS: Ablova, M. S.; Feoktistova, N. N.

TITLE: Anisotropic peculiarities in the microhardness of germanium and silicon

SOURCE: Fizika tverdogo tela, v. 6, no. 1, 1964, 116-122

TOPIC TAGS: microhardness, microhardness anisotropy, germanium, silicon, n-type semiconductor, p-type semiconductor

ABSTRACT: The microhardness was measured on a PMT-3 instrument with loads of 5 to 100 g at room temperature. The (111), (110), (100), and (112) faces were tested. It was found that the microhardness anisotropy of Ge and Si differs for n-type and p-type samples. In n-type Ge and Si, the (111) plane is hardest, the (110) the softest. But in p-type samples the reverse is true: the (110) plane is hardest, the (111) plane the softest. In n-type Ge and Si the nature of the anisotropy changes at the transition to the surface layer (~0.5-1 micron) and becomes the same as that found in p-type samples. In heavily doped p-type samples no change in microhardness is detected with depth. The change in the n-type anisotropy is explained by the presence of a p-type layer in n-type crystals of Ge and Si. The

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ACCESSION NR: AP4011747

authors conclude that it is now difficult to make an exhaustive theoretical discussion of their results, but suggest that the variations in anisotropy of microhardness may be associated with local deformation that causes redistribution of holes in different bands. "We express our thanks to A. A. Lodkin for investigating the "rest" and effect of elastic deformation on microhardness in Ge, and to T. B. Zhukova and R. P. Magala, for their x-ray work, and to T. A. Kontorova and A. P. Regel' for discussing the results and for their constant interest in the work." Orig. art. has: 7 figures and 2 tables.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors AN SSSR)

SUBMITTED: 13Jul63

DATE ACQ: 14Feb64

ENCL: 00

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NO REF SOV: 009

OTHER: 008

Card 2/2

I. 7856-66 EWP(e)/EPA(s)-2/ENT(m)/EWP(l)/EPA(w)-2/EWP(t)/EWP(b)/EWA(h) IJP(c)

ACC NR: AP5028128 JD/WE SOURCE CODE: UR/0048/65/029/011/2091/2095

AUTHOR: Syrkin, L. N.; Peoktistova, N. N.; El'gard, A. M.

ORG: none

69
B

TITLE: Reversible and irreversible changes of the piezoelectric texture in ferroelectric ceramics under compression [Report, Fourth All-Union Conference on Ferroelectricity held at Rostov-on-the Don 12-16 September 1964]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 11, 1965, 2091-2095

TOPIC TAGS: ferroelectric material, piezoelectric ceramic, solid solution, barium titanate, calcium, cobalt, piezoelectric modulus, irreversible process, compressive stress

ABSTRACT: The reversible and irreversible effects of compression on the piezoelectric modulus of a ferroelectric ceramic of the composition 95% BaTiO₃ + 5% CaTiO₃ + 47% CoO (the percentages are by weight) were investigated with experimental techniques that have been described elsewhere by V.A. Rotenberg (Fiz. tverdogo tela, 1, 1777 (1959)) and A.M. El'gard (Phys. tverdogo tela, 6, No. 8, 2502 (1964)). Fresh polarized samples were loaded up to 1200 kg/cm² in compression parallel to the axis of the piezoelectric texture and the time variation of the piezoelectric modulus was followed; the load was then removed and the recovery of the modulus was observed. The difference between the modulus before loading and a long time after the load was removed, divided by the

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